

ABSTRACT

The invention provides methods of screening for compounds that affect melanogenesis and the function of P protein in organisms, cells, or cell-free systems. The invention further relates to pharmacologic and cosmetic uses of methods of inhibiting melanogenesis, methods of activating melanogenesis, and compounds and pharmacologic compositions useful for the inhibition or activation of melanogenesis and, therefore, for lightening or darkening the pigmentation of cells and tissue, *i.e.*, skin.